

## Lithium Iron Silicate (Li<sub>2</sub>FeSiO<sub>4</sub>)

Catlog Number: BMCM-0058

### • Description

Experimental polyanionic silicate cathode offering the potential for two-lithium exchange and the highest theoretical thermal safety in lithium cells.

### • Basic Information

Chemical Formula: Li<sub>2</sub>FeSiO<sub>4</sub>

Appearance: Dark Grey Powder

Molecular Weight: 159.8 g/mol

D50 Particle Size: 0.5 - 2 μm

Tap Density: ≥ 0.8 g/cm<sup>3</sup>

BET Surface Area: 20 - 40 m<sup>2</sup>/g

1st Discharge Capacity: ≥ 160 mAh/g

1st Coulombic Efficiency: ≥ 88%

pH Value: 8.0 - 10.0

Moisture Content: ≤ 0.20%

Magnetic Impurities: ≤ 100 ppb

Li/Na Content: 8.5 - 9.0%

Ni Content: N/A

Mn Content: N/A

Co Content: N/A

Transition Metals: Iron Silicate

Crystal Structure: Polyanionic

Compaction Density: ≥ 2.1 g/cm<sup>3</sup>

Storage Conditions: Sealed, Dry

Conductivity: ~10<sup>-12</sup> S/cm

Voltage Range: 2.0 - 4.8 V

Purity: ≥ 98.5%

Primary Application: Safety-type LIB

Thermal Stability: Very High

Cycle Life: > 500 cycles

 For Research or Industrial Raw Materials, Not For Personal Medical Use!